

Amendment to the Claims:

1-2. (Cancelled)

3. (Currently Amended) A method of communicating with a medical device, in which an analog/digital interface is provided to which either measurement means or an analog sensor or a digital external device can be connected and via which analog measured signals or digital data are transmitted from the measurement means or the external device, respectively, to the medical device, the method comprising:

5 wherein operating the analog/digital interface operates—in a measurement mode when measurement means are the sensor is connected and in a communication mode when [[an]] the external device is connected;

10 wherein a changeoverchanging over between the measurement mode and the communication mode is effected automatically depending on whether the measurement meanssensor or the external device [[are or]] is connected to the analog/digital interface; and wherein:

15 in the communication mode, digitally transmitting a software update is digitally transmitted from [[a]] the connected external device into the medical device via the analog/digital interface[[;]] and digitally transmitting data from the medical device to the external device via the analog/digital interface; and

20 in the measurement mode, transmitting analog signals are transmitted from a—from the connected sensor into the medical device via the analog/digital interface.

4-16. (Cancelled)

17. (Currently Amended) The medical device as claimed in claim
1620, wherein the interface includes:

 a switch which assumes one state in response to receiving the analog sensor plug and another state in response to receiving the digital external device plug.

18-19. (Cancelled)

20. (Currently Amended) ~~The~~ A medical device which receives analog data from sensors in a measurement mode and communicates digitally with a digital external device in a communication mode, the medical device comprising: as claimed in claim 16,

5 an interface including:

a set of contacts, the contacts being configured to receive (1) a plug connected by a lead to the analog sensor, and (2) a plug connected by a lead with the digital external device, the contacts being configured such that the contacts can only connect with one of the analog sensor plug and the digital external device plug at a time; and

10 wherein the recognizing means includes:

a software routine processing unit that detects whether digital or analog data is received and which switches the interface into the communication mode when digital signals are received and into the measurement mode when analog signals are received.

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21. (Currently Amended) The ~~medical device~~ method as claimed in claim [[17]] 3, wherein the recognizing means measures further including:

measuring electrical parameters of signals received by the analog/digital interface means and switches switching between the measurement mode and the communication mode in response to the measured electrical parameters.

22. (New) The method as claimed in claim 21, wherein detecting the electrical parameters includes detecting whether the signals are digital.

23. (New) The method as claimed in claim 3, further including:
replacing an interface of an existing medical device which is unable to communicate digital with the digital external device with the analog/digital interface in order to provide digital communication between the existing medical device and
5 the digital external device.

24. (New) The medical device as claimed in claim 20, wherein the processing unit implements a software routine to detect the digital data.

25. (New) A system for communicating with a medical device, the system comprising:

at least one sensor configured to sense bodily functions of a patient and transmit along electrical signals, the sensor being connected with a sensor plug;

5 an external digital device configured to digitally transmit software updates from the external device to the medical device and to digitally receive data from the medical device via an external digital device plug; and

the medical device including an interface configured to receive analog data from sensors and transmit digital signals to and from the digital external device,
10 the interface comprising:

a set of contacts configured to connect with both the analog sensor plug and the external digital device plug one at a time;

15 a processor unit configured to detect whether digital data is being transmitted via the interface, automatically change from an analog measurement mode to a digital communication mode when the digital data is detected; such that

in the measurement mode, analog signals are transmitted from a sensor into the medical device and in the communications mode, the digital signals are transmitted to and from the external device.

26. (New) The system as claimed in claim 25, wherein the processor unit is programmed with a software routine that detects whether the digital data are being transmitted via the interface.

27. (New) The system as claimed in claim 25, further including:
a switch controlled by the processing unit to switch the interface between the measurement mode and the communications mode.